

## **CHAPTER 12**

# **POPULATION AND HOUSING**

This chapter describes the population and housing characteristics in the study area and potential changes that could occur due to implementation of the alternatives. Population and housing characteristics are defined by trends in population, selected demographic characteristics such as racial/ethnic and age composition, and size and composition of the housing stock including the occupancy, type, age, and quality at the county and community levels. Historical trends in residential construction are also considered.

### **STUDY AREA**

The study area is defined as the geographical area within which the large majority of potential related impacts are expected. The study area for population and housing is the entire counties of Imperial and Riverside, as shown on Figure 1-1.

### **REGULATORY REQUIREMENTS**

There is no State or local regulatory requirements regarding population resources. Information is compiled by the California Department of Housing and Community Development based upon data from regional and local jurisdictions.

The Department of Housing and Community Development administers the Regional Housing Needs Assessment program. This program projects population and housing growth and helps local areas plan effectively for future development.

### **HISTORICAL PERSPECTIVE**

For the past 100 years, the economic base of Imperial County traditionally has been agriculture with communities of small to moderate size. The Coachella Valley in southeastern Riverside County also has an agricultural base however urban development has been increasing over the past 20 years, as discussed below.

### **DATA SOURCES**

Information describing population and housing characteristics is derived primarily from: (1) the United States 2000 Census completed by the U.S. Census Bureau (Census Bureau); (2) annual estimates completed by the Demographics Research Unit of the California Department of Finance; (3) reports prepared by the Southern California Association of Governments (SCAG), and (4) reports prepared by the California Employment Development Department (EDD). The greatest level of detail regarding population and housing resources is provided by the Census Bureau.

### **DATA LIMITATIONS**

Historical information is reported every 10 years and may not reflect annual perturbations. Published projections are based upon statistical extrapolation of historical growth rates, taking into consideration potential changes in economic conditions, household composition, and demographic variables, such as vital statistics and migration rates. Any projections can be affected by numerous variables, such as job growth, availability of affordable financing, and personal desires of existing and future populations.

Current SCAG population projections prepared in 2004 include forecasts to 2030, while the Demographics Research Unit projections extend to 2050. Population projections are not available for the entire 75-year study period.

The information is analyzed to provide one of two perspectives: time series and snapshot-in-time. A time-series perspective illustrates the trends over time of such characteristics as population size or residential construction activity. A snapshot-in-time perspective describes specific characteristics, such as the racial/ethnic breakdown of a population, at one point in time.

## **EXISTING CONDITIONS**

Population and housing characteristics have been described for the period from 1980 to 2004. This period includes information from three federal census periods and local information collected since publication of Census 2000.

### **Population**

Imperial County has been an agricultural region for more than 100 years. In the past 20 years, residential growth has increased in Imperial County, as shown in Table 12-1. The Riverside County growth rate is somewhat higher, and the population is greater than in Imperial County, as shown in Table 12-1. The demographic structures of Imperial and Riverside counties are shown in Table 12-2. Origin can be considered as the heritage, nationality group, lineage, or country of birth of the person or the person's parents or ancestors. People who identify their origin as Spanish, Hispanic, or Latino may be of any race. It should be noted that those who identify with the terms Hispanic or Latino classify themselves in one of the specific Hispanic or Latino categories listed on the federal Census 2000 questionnaire (Mexican, Puerto Rican, or Cuban), as well as other Spanish, Hispanic, or Latino.

The demographics for communities on the Torres Martinez Indian Reservation and the Cabazon Indian Reservation lands are included in Table 12-2.

### **Housing**

Almost 90 percent of housing units in Imperial County were occupied in 2000, as shown in Table 12-3. The occupancy level generally is higher in the incorporated areas and lower in unincorporated communities. The majority of the housing units in Imperial County are classified as single-family units, and the remaining units are represented by mobile homes and recreational vehicles, as shown in Table 12-4. Most of the housing units in Brawley, Calipatria, El Centro, and Holtville were built prior to 1970, and most of the housing in the remaining portions of the county was constructed after 1970. Future supply includes about 12,000 units in various developments, of which 2,353 have received final map approvals. In 2005, 2,119 new homes were sold in Imperial County, which was an increase of nearly 200 percent over the previous year (Duffy, 2006).

Almost 87 percent of housing units in Riverside County were occupied in 2000, as shown in Table 12-5. The vacancy rate for the county was higher in La Quinta and lower in small communities. The largest share of these vacant units is characteristic of seasonal, recreational, or occasional use. The majority of the housing units in Riverside County are classified as single-family units, and the remaining units are represented by mobile homes, boats, recreational vehicles, or vans, as shown in Table 12-6.

Most of the housing units in La Quinta and Mecca were constructed after 1990. Sales of new homes in Riverside County increased by almost 4 percent in 2005. The Coachella Valley alone accounted for over 4,800 sales, representing 19 percent of the total sales. Future supply includes over 147,000 proposed units in various projects, of which nearly 31,000 have received final map approvals (Duffy, 2006).

**Table 12-1**  
**Population by County and Community (1980-2004)**

County/City	1980	1990	2000	2004	Numeric Change			Average Annual Percentage Change		
					1980-1990	1990-2000	2000-2004	1980-1990	1990-2000	2000-2004
Imperial County										
Brawley	14,946	18,923	22,052	23,785	3,977	3,129	1,733	2.4%	1.5%	1.9%
Calipatria	2,636	2,690	7,289	7,851	54	4,599	562	0.2%	10.5%	1.9%
El Centro	23,996	31,384	37,835	40,509	7,388	6,451	2,484	2.7%	1.9%	1.6%
Holtville	4,399	4,820	5,612	5,819	421	792	207	0.9%	1.5%	0.9%
Imperial	3,451	4,113	7,560	9,435	662	3,447	1,875	1.8%	6.3%	5.7%
Westmorland	1,590	1,380	2,131	2,247	-210	751	116	-1.4%	4.4%	1.3%
Bombay Beach CDP*			366							
Desert Shores CDP*			792							
Niland CDP*			1,143							
Salton City CDP*			978							
Salton Sea Beach CDP*			392							
Seeley CDP*			1,624							
Other Areas	41,092	45,993	54,587	66,916	4,901	13,889	7,224	1.1%	1.7%	5.2%
County Total	92,110	109,303	142,361	156,562	17,193	33,058	14,201	1.7%	2.7%	2.4%
Riverside County										
Coachella	9,129	16,896	22,724	27,655	7,767	5,828	4,931	6.3%	3.0%	5.0%
Indio	21,611	36,793	49,116	59,133	15,182	12,323	10,017	5.5%	2.9%	4.7%
La Quinta	2,317	11,215	23,694	32,522	8,898	12,479	8,828	17.1%	7.8%	8.2%
Mecca CDP*			5,402							
Mecca Urban Cluster*			6,589							
Thousand Palms Urban Cluster*			2,924							
Thermal Urban Cluster*			3,239							
Other Areas	630,115	1,105,509	1,431,699	1,657,433	475,394	344,344	207,580	5.8%	2.6%	3.7%
County Total	663,172	1,170,413	1,545,387	1,776,743	507,241	374,974	231,356	5.8%	2.8%	3.5%

Source: SCAG, 2005; Census Bureau, 2005 for CDPs and Urban Clusters.

\* CDP = Census Designated Place is a term used by the U.S. Bureau of the Census for a recognized, yet unincorporated, community. This information is provided only for the 2000 population data from Census 2000. CDP and Urban Cluster population data and projections for other years in this table are presented in the Other Areas category.

**Table 12-2**  
**Selected Population Characteristics, Counties and Communities (2000)**

County/City	Total Population	Population by Race <sup>a</sup>						Median Age	Average Household Size
		White	Hispanic or Latino	Black or African- American	Native American	Asian	Other		
Imperial County									
Brawley	22,052	11,638	16,280	540	285	288	8,349	29.7	3.3
Calipatria	7,289	2,361	4,180	1,554	55	46	3,109	32.6	3.6
El Centro	37,835	17,728	28,219	1,195	406	1,324	15,771	30.0	3.2
Holtville	5,612	3,051	4,144	35	51	47	2,197	30.0	3.5
Imperial	7,560	4,425	4,619	201	70	205	2,336	29.9	3.3
Westmorland	2,131	1,188	1,752	22	16	7	840	28.9	3.4
Bombay Beach CDP <sup>b</sup>	366	261	68	68	2	1	15	52.6	2.1
Desert Shores CDP <sup>b</sup>	792	582	482	11	7	2	167	36.8	2.8
Niland CDP <sup>b</sup>	1,143	626	632	36	23	52	321	36.2	2.7
Salton City CDP <sup>b</sup>	978	720	318	8	20	6	170	49.0	2.4
Salton Sea Beach CDP <sup>b</sup>	392	287	88	8	13	2	70	60.5	2.0
Seeley CDP <sup>b</sup>	1,624	889	1,324	12	18	38	583	27.2	3.7
County Total	142,631	70,290	102,817	5,624	2,785	2,836	55,634	31.0	3.3
Riverside County									
Coachella	22,724	8,810	22,132	103	198	71	12,854	22.8	4.7
Indio	49,116	23,903	37,028	1,361	559	742	20,368	27.3	3.5
La Quinta	23,694	18,602	7,584	336	192	446	3,282	36.4	2.8
Mecca CDP <sup>b</sup>	5,402	1,302	5,295	6	55	40	3,817	22.6	5.0
Mecca Urban Cluster <sup>b</sup>	6,589	1,872	6,483	6	61	60	4,377	22.5	5.0
Thousand Palms Urban Cluster <sup>b</sup>	2,924	1,151	2,826	1	50	17	1,595	21.9	5.0
Thermal Urban Cluster <sup>b</sup>	3,239	1,065	3,133	1	16	15	2,015	24.0	4.5
County Total	1,545,387	1,013,478	559,575	96,421	22,070	56,954	288,868	33.1	3.0

Source: Census Bureau, 2005.

<sup>a</sup> Populations of subcategories under Racial Characteristics exceed the total population due to individuals reporting as members of more than one ethnic/racial group.

<sup>b</sup> CDP = Census Designated Place is a term used by the U.S. Bureau of the Census for a recognized, yet unincorporated, community.

**Table 12-3**  
**Imperial County and Communities, Housing Occupancy and Tenure Characteristics (2000)**

	Imperial County	Brawley	Calipatria	EI Centro	Holtville	Imperial	Westmorland	Bombay Beach CDP*	Desert Shores CDP*	Niland CDP*	Salton City CDP*	Salton Sea Beach CDP*	Seeley CDP*
<b>Housing Units (Number)</b>													
Housing Units	43,891	7,038	961	12,263	1,617	2,385	667	440	406	530	730	384	460
Occupied	39,384	6,631	899	11,439	1,564	2,308	625	178	279	422	416	200	438
Owner	22,975	3,547	543	5,748	996	1,647	317	137	229	287	343	161	281
Renter	16,409	3,084	356	5,691	568	661	308	41	50	135	73	39	157
Vacant	4,507	407	62	824	53	77	42	262	127	108	314	184	22
For rent	842	179	13	291	16	21	15	17	11	49	4	3	7
For sale only	319	33	14	71	7	11	8	12	8	8	20	13	2
Rented or sold, not occupied	230	22	4	42	8	12	5	5	1	4	7	2	1
Seasonal, recreational, or occasional use	2,081	53	12	300	2	6	0	148	57	28	235	103	4
Migrant workers	38	11	0	12	0	0	0	0	2	0	0	0	0
Other	997	109	19	108	20	27	14	80	48	19	48	63	8
<b>Housing Units (Contribution to Total)</b>													
Occupied	89.7%	94.2%	93.5%	93.3%	96.7%	96.8%	93.7%	40.5%	68.7%	79.6%	57.0%	52.1%	95.2%
Owner	52.3%	50.4%	56.5%	46.9%	61.6%	69.1%	47.5%	31.1%	56.4%	54.2%	47.0%	41.9%	61.1%
Renter	37.4%	43.8%	37.0%	46.4%	35.1%	27.7%	46.2%	9.3%	12.3%	25.5%	10.0%	10.2%	34.1%
Vacant	10.3%	5.8%	6.5%	6.7%	3.3%	3.2%	6.3%	59.5%	31.3%	20.4%	43.0%	47.9%	4.8%
For rent	1.9%	2.5%	1.4%	2.4%	1.0%	0.9%	2.2%	3.9%	2.7%	9.2%	0.5%	0.8%	1.5%
For sale only	0.7%	0.5%	1.5%	0.6%	0.4%	0.5%	1.2%	2.7%	2.0%	1.5%	2.7%	3.4%	0.4%
Rented or sold, not occupied	0.5%	0.3%	0.4%	0.3%	0.5%	0.5%	0.7%	1.1%	0.2%	0.8%	1.0%	0.5%	0.2%
Seasonal, recreational, or occasional use	4.7%	0.8%	1.2%	2.4%	0.1%	0.3%	0.0%	33.6%	14.0%	5.3%	32.2%	26.8%	0.9%
Migrant workers	0.1%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%
Other	2.3%	1.5%	2.0%	0.9%	1.2%	1.1%	2.1%	18.2%	11.8%	3.6%	6.6%	16.4%	1.7%

**Table 12-3**  
**Imperial County and Communities, Housing Occupancy and Tenure Characteristics (2000)**

	Imperial County	Brawley	Calipatria	EI Centro	Holtville	Imperial	Westmorland	Bombay Beach CDP*	Desert Shores CDP*	Niland CDP*	Salton City CDP*	Salton Sea Beach CDP*	Seeley CDP*
<b>Households</b>													
Average Household Size	3.33	3.28	3.55	3.23	3.51	3.26	3.41	2.06	2.84	2.71	2.35	1.96	3.71
Owner occupied	3.36	3.34	3.41	3.34	3.51	3.33	3.39	1.85	2.67	2.61	2.25	1.8	3.58
Renter occupied	3.3	3.21	3.77	3.12	3.49	3.1	3.43	2.76	3.6	2.9	2.81	2.62	3.94

Source: Census Bureau, 2005.

\* CDP = Census Designated Place is a term used by the U.S. Bureau of the Census for a recognized, yet unincorporated, community.

**Table 12-4**  
**Imperial County and Communities, Housing Types (2000)**

	Imperial County	Brawley	Calipatria	El Centro	Holtville	Imperial	Westmorland	Bombay Beach CDP*	Desert Shores CDP*	Niland CDP*	Salton City CDP*	Salton Sea Beach CDP*	Seeley CDP*
<b>Median Number of Rooms per Housing Unit</b>													
Total housing units	4.5	4.6	4.7	4.4	4.6	5.2	4.3	3.6	3.5	3.7	4.4	4.4	4.4
Occupied housing units	4.6	4.6	4.7	4.5	4.6	5.2	4.4	3.9	3.4	3.9	4.8	4.1	4.5
Owner occupied	5.3	5.4	5	5.6	5.2	5.5	5	3.9	3.5	4.3	4.8	4.1	4.8
Renter occupied	3.7	3.7	4.1	3.4	3.9	4	3.4	4	3.4	2.9	4.4	4.2	4
<b>Living Units Within Structure</b>													
1	61.6%	68.8%	77.9%	57.1%	70.9%	82.4%	65.5%	42.4%	31.8%	41.9%	46.3%	37.0%	51.5%
2 to 9	11.4%	13.4%	10.2%	15.2%	11.5%	13.3%	16.3%	0.0%	12.3%	0.0%	9.3%	1.8%	14.0%
10 to 19	2.6%	2.4%	1.2%	5.4%	0.6%	1.7%	5.6%	0.0%	0.0%	0.0%	0.0%	2.2%	0.7%
20 to 49	2.9%	4.6%	2.7%	4.4%	4.6%	0.9%	5.9%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%
50 or more	3.8%	4.4%	1.6%	7.1%	0.5%	0.6%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%
Mobile home	15.1%	6.3%	4.0%	7.9%	11.9%	1.2%	5.5%	49.6%	42.1%	49.8%	44.4%	59.0%	31.2%
Recreational vehicle	2.6%	0.2%	2.5%	2.8%	0.0%	0.0%	0.3%	8.0%	13.8%	8.3%	0.0%	0.0%	0.7%
<b>Year Structure Built</b>													
1990 to 2000	21.1%	19.9%	19.6%	17.1%	11.6%	42.6%	21.0%	8.2%	9.4%	8.1%	7.2%	21.2%	18.6%
1980 to 1989	19.1%	14.0%	19.1%	22.2%	15.9%	19.2%	18.0%	3.9%	31.0%	14.2%	19.6%	25.6%	26.6%
1970 to 1979	20.6%	16.2%	21.1%	19.1%	23.4%	10.1%	18.9%	34.7%	23.4%	33.0%	32.3%	22.3%	27.3%
1960 to 1969	15.4%	16.2%	14.7%	16.5%	11.9%	13.0%	20.1%	50.4%	13.1%	23.5%	35.7%	25.6%	10.3%
Before 1960	23.9%	33.7%	25.5%	25.0%	37.2%	15.2%	21.9%	2.7%	23.2%	21.2%	5.1%	5.1%	17.2%
Median year built	1975	1970	1975	1974	1970	1986	1974	1969	1976	1972	1973	1979	1978
<b>Other Characteristics</b>													
Lacking complete plumbing facilities	1.9%	2.0%	0.7%	1.1%	0.6%	0.4%	0.0%	6.5%	8.9%	6.3%	0.0%	4.8%	3.1%
Lacking complete kitchen facilities	2.0%	1.8%	0.3%	1.3%	0.3%	0.7%	0.7%	6.5%	7.4%	9.5%	1.0%	2.6%	3.1%

Source: Census Bureau, 2005.

\* CDP = Census Designated Place is a term used by the U.S. Bureau of the Census for a recognized, yet unincorporated, community.

**Table 12-5**  
**Riverside County and Communities, Housing Occupancy and Tenure Characteristics (2000)**

	Riverside County	Coachella	Indio	La Quinta	Mecca CDP*	Mecca Urban Cluster	One Hundred Palms Urban Cluster	Thermal Urban Cluster
<b>Housing Units (Number)</b>								
Housing Units	584,674	5,024	16,909	11,812	1,059	1,280	553	735
Occupied	506,218	4,807	13,871	8,445	1,049	1,265	529	709
Owner	348,532	2,927	7,794	6,879	479	527	180	315
Renter	157,686	1,880	6,077	1,566	570	738	349	394
Vacant	78,456	217	3,038	3,367	10	15	24	26
For rent	12,303	47	311	77	4	6	7	10
For sale only	9,098	65	190	288	2	3	1	0
Rented or sold, not occupied	4,126	16	73	120	0	0	0	1
Seasonal, recreational, or occasional use	38,241	8	2,166	2,534	3	4	2	1
Migrant workers	55	2	6	1	1	1	3	0
Other	14,633	79	292	347	0	1	11	14
<b>Housing Units (Contribution to Total)</b>								
Occupied	86.6%	95.7%	82.0%	71.5%	99.1%	98.8%	95.7%	96.5%
Owner	59.6%	58.3%	46.1%	58.2%	45.2%	41.2%	32.5%	42.9%
Renter	27.0%	37.4%	35.9%	13.3%	53.8%	57.7%	63.1%	53.6%
Vacant	13.4%	4.3%	18.0%	28.5%	0.9%	1.2%	4.3%	3.5%
For rent	2.1%	0.9%	1.8%	0.7%	0.4%	0.5%	1.3%	1.4%
For sale only	1.6%	1.3%	1.1%	2.4%	0.2%	0.2%	0.2%	0.0%
Rented or sold, not occupied	0.7%	0.3%	0.4%	1.0%	0.0%	0.0%	0.0%	0.1%
Seasonal, recreational, or occasional use	6.5%	0.2%	12.8%	21.5%	0.3%	0.3%	0.4%	0.1%
Migrant workers	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.5%	0.0%
Other	2.5%	1.6%	1.7%	2.9%	0.0%	0.1%	2.0%	1.9%
<b>Households</b>								
Average Household Size	2.98	4.72	3.48	2.8	5.04	5.03	5	4.45
Owner occupied	3	4.86	3.45	2.76	5.22	5.22	4.87	4.46
Renter occupied	2.96	4.5	3.51	2.96	4.89	4.9	5.07	4.44

Source: Census Bureau, 2005.

\* CDP = Census Designated Place is a term used by the U.S. Bureau of the Census for a recognized, yet unincorporated, community.



**Table 12-6**  
**Riverside County and Communities, Housing Types (2000)**

	Riverside County	Coachella	Indio	La Quinta	Mecca CDP*	Mecca Urban Cluster	One Hundred Palms Urban Cluster	Thermal Urban Cluster
<b>Median Number of Rooms per Housing Unit</b>								
Total housing units	5.2	3.8	4.3	5.8	4	3.8	3.3	3.3
Occupied housing units	5.3	3.8	4.4	5.8	4	3.8	3.3	3.2
Owner occupied	5.8	4.6	5.3	5.9	3.4	3.5	3.4	4
Renter occupied	3.9	3.2	3.3	5.1	4.3	4	3.2	2.9
<b>Living Units Within Structure</b>								
1	68.2%	68.0%	50.5%	91.3%	49.7%	43.7%	21.9%	33.7%
2 to 9	8.3%	16.5%	13.6%	4.0%	37.8%	32.1%	2.0%	10.8%
10 to 19	2.6%	1.9%	3.8%	1.9%	0.8%	0.6%	0.0%	0.0%
20 to 49	2.0%	1.2%	2.4%	0.2%	0.8%	0.6%	0.0%	0.0%
50 or more	4.7%	3.3%	10.9%	0.3%	1.1%	1.0%	0.0%	1.3%
Mobile home	13.1%	9.1%	16.1%	2.2%	9.8%	22.0%	76.2%	54.2%
Recreational vehicle	1.1%	0.0%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Year Structure Built</b>								
1990 to 2000	24.6%	29.6%	27.0%	58.4%	56.5%	49.5%	15.8%	7.7%
1980 to 1989	30.0%	22.8%	24.9%	22.9%	9.4%	11.7%	30.5%	18.6%
1970 to 1979	20.3%	14.9%	18.2%	13.0%	15.6%	20.4%	25.6%	24.2%
1960 to 1969	11.7%	18.3%	15.5%	3.5%	10.4%	9.6%	14.1%	21.7%
Before 1960	13.4%	14.4%	14.4%	2.2%	8.1%	8.7%	14.1%	27.9%
Median year structure built	1982	1981	1981	1992	1991	1990	1979	1970
<b>Other Characteristics</b>								
Lacking complete plumbing facilities	0.8%	1.7%	0.8%	0.2%	0.9%	2.0%	11.1%	0.9%
Lacking complete kitchen facilities	1.1%	1.8%	0.8%	0.3%	1.6%	2.6%	5.7%	0.9%

Source: Census Bureau, 2005.

\* CDP = Census Designated Place is a term used by the U.S. Bureau of the Census for a recognized, yet unincorporated, community.

Almost 93 percent of the total numbers of housing units on both the Torres Martinez and Cabazon reservations were occupied in 2000 as shown on Table 12-7. Housing types on both reservations are shown on Table 12-8. The average annual number of residential units authorized for construction from 1990 through 2004 in Imperial and Riverside counties is shown in Table 12-9.

**Table 12-7**  
**Cabazon Indian Reservation and Torres Martinez Indian Reservation,**  
**Housing Occupancy and Tenure Characteristics (2000)**

	Cabazon Indian Reservation	Torres Martinez Indian Reservation
<b>Housing Units (Number)</b>		
Housing Units	192	933
Occupied	178	864
Owner	93	348
Renter	85	516
Vacant	14	69
For Rent	1	11
For sale only	0	2
Rented or sold, not occupied	0	6
Seasonal, recreational, or occasional use	2	12
Migrant workers	0	0
Other	11	38
<b>Housing Units (Contribution to Total)</b>		
Housing Units	100.0%	100.0%
Occupied	92.7%	92.6%
Owner	48.4%	37.3%
Renter	44.3%	55.3%
Vacant	7.3%	7.4%
For Rent	0.5%	1.2%
For sale only	0.0%	0.2%
Rented or sold, not occupied	0.0%	0.6%
Seasonal, recreational, or occasional use	1.0%	1.3%
Migrant workers	0.0%	0.0%
Other	5.7%	4.1%
<b>Households</b>		
Average Household Size	3.96	4.55
Owner occupied	3.86	4.12
Renter occupied	4.07	4.84

Source: Census Bureau, 2005.

**Table 12-8**  
**Cabazon Indian Reservation and Torres Martinez Indian Reservation,**  
**Housing Types (2000)**

	<b>Cabazon Indian Reservation</b>	<b>Torres Martinez Indian Reservation</b>
<b>Median Number of Rooms</b>		
Total housing units	4.2	3.2
Occupied housing units	4.0	3.3
Owner occupied	4.4	3.0
Renter occupied	3.7	3.4
Total Housing Units	193	934
<b>Living Units Within Structure</b>		
1	87.6%	8.5%
2 to 9	9.3%	1.0%
10 to 19	0.0%	0.0%
20 to 49	0.0%	0.0%
50 or more	2.1%	0.0%
Mobile home	1.0%	90.6%
Recreational vehicle	0.0%	0.0%
<b>Year Structure built</b>		
1990 to 2000	2.6%	21.0%
1980 to 1989	5.2%	29.0%
1970 to 1979	11.9%	28.7%
1960 to 1969	29.5%	14.8%
Before 1960	50.8%	6.6%
Median year structure built	1960	1980
<b>Other Characteristics</b>		
Lacking complete plumbing facilities	4.7%	10.4%
Lacking complete kitchen facilities	5.7%	4.0%

Source: Census Bureau, 2005.

**Table 12-9**  
**Authorized Housing Unit Building Permits by County and Community (1990-2004)**

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Annual Average <sup>a</sup>
<b>Imperial County</b>																
Brawley	274	156	157	104	155	47	36	21	29	37	22	32	79	167	172	99
Calipatria	5	109	6	5	9	15	3	2	3	1	82	11	12	0	NA <sup>b</sup>	19
El Centro	425	150	107	95	165	46	43	90	43	36	46	153	90	219	644	157
Holtville	41	36	41	27	13	5	6	3	9	2	6	8	0	0	NA <sup>b</sup>	14
Imperial	60	45	243	149	129	84	65	54	97	90	79	98	272	250	77	119
Westmorland	16	7	4	3	21	1	28	0	4	3	2	3	1	2	68	11
<b>County Total</b>	<b>1,087</b>	<b>837</b>	<b>1,001</b>	<b>627</b>	<b>834</b>	<b>492</b>	<b>352</b>	<b>342</b>	<b>433</b>	<b>339</b>	<b>773</b>	<b>1,057</b>	<b>1,021</b>	<b>1,201</b>	<b>1,778</b>	<b>812</b>
<b>Riverside County</b>																
Coachella	47	273	91	140	124	99	74	31	148	174	178	565	102	451	988	232
Indio	1,219	712	248	252	245	165	105	128	234	285	464	586	1,112	1,716	2,557	669
La Quinta	274	259	320	324	530	504	605	495	904	1,190	1,493	916	849	1,395	1,464	768
<b>County Total</b>	<b>15,362</b>	<b>9,283</b>	<b>8,220</b>	<b>7,274</b>	<b>8,015</b>	<b>6,806</b>	<b>7,540</b>	<b>9,747</b>	<b>12,527</b>	<b>14,154</b>	<b>15,025</b>	<b>19,012</b>	<b>22,255</b>	<b>30,353</b>	<b>33,446</b>	<b>14,601</b>
<b>Share of Total Building Permits in Imperial County</b>																
Brawley	25.2%	18.6%	15.7%	16.6%	18.6%	9.6%	10.2%	6.1%	6.7%	10.9%	2.8%	3.0%	7.7%	16.4%	16.8%	12.3%
Calipatria	0.5%	13.0%	0.6%	0.8%	1.1%	3.0%	0.9%	0.6%	0.7%	0.3%	10.6%	1.0%	1.2%	0.0%	NA <sup>b</sup>	2.4%
El Centro	39.1%	17.9%	10.7%	15.2%	19.8%	9.3%	12.2%	26.3%	9.9%	10.6%	6.0%	14.5%	8.8%	21.4%	63.1%	19.0%
Holtville	3.8%	4.3%	4.1%	4.3%	1.6%	1.0%	1.7%	0.9%	2.1%	0.6%	0.8%	0.8%	0.0%	0.0%	NA <sup>b</sup>	1.8%
Imperial	5.5%	5.4%	24.3%	23.8%	15.5%	17.1%	18.5%	15.8%	22.4%	26.5%	10.2%	9.3%	26.6%	24.5%	7.5%	16.9%
Westmorland	1.5%	0.8%	0.4%	0.5%	2.5%	0.2%	8.0%	0.0%	0.9%	0.9%	0.3%	0.3%	0.1%	0.2%	6.7%	1.5%
<b>Share of Total Building Permits in Riverside County</b>																
Coachella	0.3%	2.9%	1.1%	1.9%	1.5%	1.5%	1.0%	0.3%	1.2%	1.2%	1.2%	3.0%	0.5%	2.0%	4.4%	1.6%
Indio	7.9%	7.7%	3.0%	3.5%	3.1%	2.4%	1.4%	1.3%	1.9%	2.0%	3.1%	3.1%	5.0%	7.7%	11.5%	4.3%
La Quinta	1.8%	2.8%	3.9%	4.5%	6.6%	7.4%	8.0%	5.1%	7.2%	8.4%	9.9%	4.8%	3.8%	6.3%	6.6%	5.8%

Source: HUD, 2005.

<sup>a</sup> Average is over 15-year period, except for Calipatria and Holtville where the period is 14 years.

<sup>b</sup> NA indicates that no data was available for this year.

## Employment

Between 2000 and 2005, total industry employment in Imperial County increased by 3,700 jobs, or about 7 percent (EDD, 2006a). About half the jobs in the county are in the government and agriculture sectors, as shown in Table 12-10.

**Table 12-10**  
**Employment Distribution in Imperial County (2000-2005)**

Industry	2000		2005		2000 to 2005	
	Number of Employees	Employment Share	Number of Employees	Employment Share	Total Change	Average Annual Compound Growth Rate
Agriculture	12,300	24.4%	11,800	21.8%	-4.1%	-0.8%
Construction and Mining	2,000	4.0%	1,900	3.5%	-5.0%	-1.0%
Manufacturing	1,600	3.2%	2,400	4.4%	50.0%	8.4%
Wholesale Trade	1,700	3.4%	1,600	3.0%	-5.9%	-1.2%
Retail Trade	6,200	12.3%	7,400	13.7%	19.4%	3.6%
Transportation and Utilities	1,600	3.2%	1,800	3.3%	12.5%	2.4%
Information	400	0.8%	400	0.7%	0.0%	0.0%
Financial Activities	1,400	2.8%	1,300	2.4%	-7.1%	-1.5%
Services	7,800	15.4%	8,800	16.2%	12.8%	2.4%
Government	15,500	30.7%	16,800	31.0%	8.4%	1.6%
<b>Total Employment</b>	<b>50,500</b>	<b>100%</b>	<b>54,200</b>	<b>100%</b>	<b>7.3%</b>	<b>1.4%</b>

Source: EDD, 2006a.

Between 2000 and 2005, employment in the Riverside-San Bernardino-Ontario Metropolitan Statistical Area increased by 225,300 jobs or about 22 percent (EDD, 2006a). The largest sector contributing to this increase in employment was the construction sector which accounted for 42,000 jobs, or 19 percent, as shown in Table 12-11.

**Table 12-11**  
**Employment Distribution in Riverside-San Bernardino-Ontario**  
**Metropolitan Statistical Area (2000-2005)**

Industry	2000		2005		2000-2005	
	Number of Employees	Employment Share	Number of Employees	Employment Share	Total Change	Average Annual Compound Growth Rate
Agriculture	21,700	2.1%	18,200	1.5%	-16.1%	-3.5%
Construction and Mining	81,400	8.0%	123,500	10.0%	52.6%	8.8%
Manufacturing	120,100	11.9%	120,200	9.7%	0.1%	0.0%
Wholesale Trade	38,300	3.8%	49,200	4.0%	28.5%	5.1%
Retail Trade	127,400	12.6%	165,000	13.4%	29.5%	5.3%
Transportation and Utilities	46,400	4.6%	59,700	4.8%	28.7%	5.2%
Information	12,900	1.3%	14,400	1.2%	11.6%	2.2%
Financial Activities	34,800	3.4%	48,700	3.9%	39.9%	7.0%
Services	335,000	33.2%	416,100	33.7%	24.2%	4.4%
Government	192,100	19.0%	220,400	17.8%	14.7%	2.8%
<b>Total Employment</b>	<b>1,010,100</b>	<b>100%</b>	<b>1,235,400</b>	<b>100%</b>	<b>22.3%</b>	<b>4.1%</b>

Source: EDD, 2006a.

## ENVIRONMENTAL IMPACTS

### Analysis Methodology

The impact assessment methodology used to support the population and housing analysis is based upon changes in employment levels, population growth, and displacement of people or housing that could occur due to implementation of the alternatives.

### Significance Criteria

The following significance criteria were based on CEQA and air quality regulatory agency guidance and used to determine if changes as compared to Existing Conditions and the No Action Alternative would:

- Induce population growth either directly or indirectly; or
- Displace existing population or housing.

### Application of Significance Criteria

Significance criteria have been applied to the alternatives considered in the PEIR. The following list summarizes the overall methodology in the application of the criteria to the alternatives:

- **Induce Population Growth** - The facilities under all alternatives would be located in the Sea Bed or along the shoreline, and do not include residential facilities or other facilities that would result in direct population growth. Therefore, the analysis in the PEIR does not evaluate direct population increases related to use of the facilities. The analysis does consider the potential for direct population growth related to the need for construction and operations and maintenance

workers. Indirect population growth could occur due to recreational, commercial, or industrial opportunities, as described in Chapter 24; and

- **Displace Populations or Housing** - The facilities under all alternatives would be located in the Sea Bed or along the shoreline in areas where there are no housing units. Therefore, the analysis in the PEIR does not evaluate displacement of population or housing units.

## Summary of Assumptions

The assumptions related to the descriptions of the alternatives are described in Chapter 3. The specific assumptions related to the analysis for population and housing are summarized in Table 12-12.

**Table 12-12**  
**Summary of Assumptions for Population and Housing**

<b>Assumptions Common to All Alternatives</b>	
1.	Facilities would be located within the Sea Bed and along the shoreline in areas without housing or other buildings.
2.	The alternatives do not include facilities to be used specifically for residential, commercial, recreational, or industrial uses, however, these facilities could be evaluated in project-level analyses.
3.	Truck drivers for imported rock and gravel would reside in areas near the quarries or truck depots, and are not included in the number of employees analyzed for the construction work.
<b>Assumptions Specific to the Alternatives</b>	
No Action Alternative and Alternatives 1, 2, 3, 4, 5, 6, 7, and 8	No additional assumptions were made.

## Summary of Impact Assessment

The impacts shown in Table 12-13 assume implementation of the Next Steps to reduce the adverse impacts.

### No Action Alternative

As described in Chapter 3, this alternative would involve construction and operations and maintenance activities for the Sedimentation/Distribution Basins, Air Quality Management, Pupfish Channels, and Salton Sea. The construction activities would be identical under the No Action Alternative-CEQA Conditions and the No Action Alternative-Variability Conditions. Therefore, impacts related to disturbance would be the same for both conditions.

The California Department of Finance (DOF) projections for the period 2000 to 2050 show that the populations of Imperial and Riverside counties are expected to increase, as presented in Tables 12-14 and 12-15, respectively. Population projections beyond 2050 have not been developed by DOF or other agencies. For 2005 to 2030, the number of housing units is projected to increase in Imperial and Riverside counties, as shown in Table 12-16. Separate population and housing projections for the Cabazon Tribal lands and Torres Martinez Tribal lands are not available.

Industry non-farm employment projections are available for Imperial and Riverside counties, as shown in Tables 12-17 and 12-18, respectively. As shown in these tables, the construction and mining sector is anticipated to increase in both counties.

**Table 12-13**  
**Summary of Benefit and Impact Assessments to Population and Housing**

Alternative	Basis of Comparison	Changes by Phase				Comments	Next Steps
		I	II	III	IV		
Criterion: Induce population growth directly due to construction activities.							
No Action Alternative	Existing Conditions	O	O	O	O	The facilities would require less than 1 percent of the projected work force during construction and operations and maintenance; and, therefore, would not cause an increase in population.	None required
	No Action Alternative	NA	NA	NA	NA		
Alternatives 1 - 5	Existing Conditions	O	O	O	O	The facilities would require less than 2 percent of the projected work force during construction and less than 1 percent of the projected work force during operations and maintenance; and, therefore, would not cause an increase in population.	Same as No Action Alternative.
	No Action Alternative	O	O	O	O		
Alternatives 6 - 8	Existing Conditions	O	O	O	O	The facilities would require less than 3 percent of the projected work force during construction and less than 1 percent of the projected work force during operations and maintenance; and, therefore, would not cause an increase in population.	Same as No Action Alternative.
	No Action Alternative	O	O	O	O		

Legend for Types of Benefits or Impacts in Each Phase:

S = Significant Impact  
O = No Impact  
L = Less Than Significant  
B = Beneficial Impact  
NA = Not Analyzed



**Table 12-14  
Imperial County Population Projections (2000-2050)**

	<b>Total</b>	<b>White</b>	<b>Hispanic or Latino</b>	<b>Black or African American</b>	<b>Native American</b>	<b>Asian</b>	<b>Pacific Islander</b>	<b>Multirace</b>
<b>Total Population</b>								
2000	143,660	28,978	103,902	5,417	1,866	2,632	88	777
2010	178,201	25,292	136,623	8,594	2,529	4,168	88	907
2020	214,386	23,281	168,950	12,035	3,280	5,745	88	1,007
2030	254,989	21,900	202,719	16,974	4,185	8,018	88	1,105
2040	296,656	20,722	237,163	22,078	5,033	10,408	81	1,171
2050	339,506	20,561	271,081	27,503	5,951	13,089	78	1,243
<b>Change in Total Population, 2000-2050</b>								
Total Population Change	195,846	-8,417	167,179	22,086	4,085	10,457	-10	466
Total Percent Change	136.3%	-29.0%	160.9%	407.7%	218.9%	397.3%	-11.4%	60.0%
Average Annual Percent Change	1.7%	-0.7%	1.9%	3.3%	2.4%	3.3%	-0.2%	0.9%
<b>Percent of Total Population by Race</b>								
2000		20.2%	72.3%	3.8%	1.3%	1.8%	0.1%	0.5%
2010		14.2%	76.7%	4.8%	1.4%	2.3%	0.1%	0.5%
2020		10.9%	78.8%	5.6%	1.5%	2.7%	<0.0%	0.5%
2030		8.6%	79.5%	6.7%	1.6%	3.1%	<0.0%	0.4%
2040		7.0%	80.0%	7.4%	1.7%	3.5%	<0.0%	0.4%
2050		6.0%	79.9%	8.1%	1.8%	3.9%	<0.0%	0.4%

Source: DOF, 2005.

**Table 12-15**  
**Riverside County Population Projections (2000-2050)**

	<b>Total</b>	<b>White</b>	<b>Hispanic or Latino</b>	<b>Black</b>	<b>American Indian</b>	<b>Asian</b>	<b>Pacific Islander</b>	<b>Multirace</b>
<b>Total Population</b>								
2000	1,553,902	796,892	565,714	94,332	10,633	57,356	3,459	25,516
2010	2,165,148	819,380	1,019,756	160,014	18,836	106,845	6,798	33,519
2020	2,675,648	779,857	1,458,741	212,689	32,317	141,784	9,202	41,058
2030	3,180,411	718,496	1,924,103	261,566	44,776	171,358	11,211	48,901
2040	3,717,961	643,746	2,446,744	307,362	56,334	195,514	12,872	55,389
2050	4,305,161	570,757	3,023,926	351,503	67,129	216,391	14,352	61,103
<b>Change in Total Population, 2000-2050</b>								
Total Population Change	2,751,259	-226,135	2,458,212	257,171	56,496	159,035	10,893	35,587
Total Percent Change	177.0%	-28.4%	434.5%	272.6%	531.3%	277.3%	314.9%	139.5%
Average Annual Percent Change	2.1%	-0.7%	3.4%	2.7%	3.8%	2.7%	2.9%	1.8%
<b>Percent of Total Population by Race</b>								
2000		51.3%	36.4%	6.1%	0.7%	3.7%	0.2%	1.6%
2010		37.8%	47.1%	7.4%	0.9%	4.9%	0.3%	1.6%
2020		29.2%	54.5%	8.0%	1.2%	5.3%	0.3%	1.5%
2030		22.6%	60.5%	8.2%	1.4%	5.4%	0.4%	1.5%
2040		17.3%	65.8%	8.3%	1.5%	5.3%	0.4%	1.5%
2050		13.3%	70.2%	8.2%	1.6%	5.0%	0.3%	1.4%

Source: DOF, 2005.

**Table 12-16**  
**Housing Projections for Counties and Cities (2000-2030)**

	2000	2005	2010	2015	2020	2025	2030	Change (2005-2030)		
								Numeric	Total Change as Percentage	Average Annual Change
Imperial County										
Brawley City	7,038	7,445	9,314	11,016	12,713	14,360	16,022	8,577	115.2%	3.11%
Calexico City	6,983	9,293	12,865	13,700	14,525	15,315	16,130	6,837	73.6%	2.23%
Calipatria City	961	1,023	1,120	1,227	1,334	1,438	1,541	518	50.6%	1.65%
El Centro City	12,263	12,180	13,533	14,560	15,545	16,536	17,461	5,281	43.4%	1.45%
Holtville City	1,617	1,614	1,738	1,862	1,980	2,101	2,212	598	37.1%	1.27%
Imperial City	2,385	3,081	4,435	6,535	8,644	10,627	12,735	9,654	313.3%	5.84%
Westmorland City	667	671	.761	906	1,045	1,181	1,313	642	95.7%	2.72%
County Total	43,891	45,018	54,626	61,974	69,336	76,606	83,735	38,717	86.0%	2.51%
Riverside County										
Coachella City	5,024	5,772	6,287	7,523	8,774	10,007	11,229	5,457	94.5%	2.70%
Indio City	16,909	15,996	18,196	20,672	23,182	25,659	28,117	12,121	75.8%	2.28%
La Quinta City	11,812	11,729	14,466	15,699	16,953	18,191	19,427	7,698	65.6%	2.04%
County Total	584,674	587,257	685,775	796,360	907,932	1,018,239	1,127,780	540,523	92.0%	2.64%

Sources: SCAG, 2005 and Census Bureau, 2005.

**Table 12-17**  
**Non-Farm Employment Projections for Imperial County (2002-2012)**

Industry	2002		2012		2002 to 2012	
	Number of Employees	Employment Share	Number of Employees	Employment Share	Total Change	Average Annual Compound Growth Rate
Construction and Mining	1,700	4.2%	2,650	5.2%	950	4.5%
Manufacturing	2,500	6.2%	2,900	5.7%	400	1.5%
Wholesale Trade	1,600	3.9%	1,800	3.6%	200	1.2%
Retail Trade	6,200	15.3%	8,850	17.5%	2,650	3.6%
Transportation and Utilities	1,700	4.2%	2,300	4.5%	600	3.1%
Information	400	1.0%	500	1.0%	100	2.3%
Financial Activities	1,400	3.4%	1,750	3.5%	350	2.3%
Services	8,400	20.7%	10,800	21.3%	2,400	2.5%
Government	16,700	41.1%	19,150	37.8%	2,450	1.4%
<b>Total Non-Farm Employment</b>	<b>40,600</b>	<b>100%</b>	<b>50,700</b>	<b>100%</b>	<b>10,100</b>	<b>2.2%</b>

Source: EDD, 2006a.

**Table 12-18**  
**Non-Farm Employment Projections for Riverside County (2002-2012)**

Industry	2002		2012		2002 to 2012	
	Number of Employees	Employment Share	Number of Employees	Employment Share	Total Change	Average Annual Compound Growth Rate
Construction and Mining	92,100	8.7%	128,000	9.3%	35,900	3.3%
Manufacturing	115,400	10.8%	129,300	9.4%	13,900	1.1%
Wholesale Trade	41,900	3.9%	57,500	4.2%	15,600	3.2%
Retail Trade	137,500	12.9%	180,100	13.0%	42,600	2.7%
Transportation and Utilities	46,000	4.3%	69,300	5.0%	23,300	4.2%
Information	14,100	1.3%	16,200	1.2%	2,100	1.4%
Financial Activities	39,500	3.7%	52,300	3.8%	12,800	2.8%
Services	364,500	34.3%	490,500	35.5%	126,000	3.0%
Government	212,700	20.0%	258,800	18.7%	46,100	2.0%
<b>Total Non-Farm Employment</b>	<b>1,063,700</b>	<b>100%</b>	<b>1,382,000</b>	<b>100%</b>	<b>318,300</b>	<b>2.7%</b>

Source: EDD, 2006a.

Construction of the facilities under the No Action Alternative would occur in Phases I through III. As described in Chapter 3, most of the construction activity would occur between 2014 and 2025. The peak

construction period would occur by 2020. Therefore, for the purpose of the evaluation of population and housing, it is necessary to understand the availability of construction workers prior to 2020. The EDD projects the availability of labor by occupation for each county in the State through 2012 which is the period prior to construction. The California Department of Transportation (CalTrans) also projects the availability of construction workers based on estimates by the California Economic Forecast Project (CalTrans, 2005). Projections for the construction sector for the years 2005 to 2025 for Imperial and Riverside counties are summarized in Table 12-19.

**Table 12-19**  
**Construction Sector Employment Projections in Imperial and Riverside Counties**

Year	Imperial	Riverside
2005	1,770	70,900
2006	1,810	74,200
2007	1,820	76,300
2008	1,830	77,300
2009	1,830	76,400
2010	1,820	77,300
2011	1,800	78,500
2012	1,790	79,100
2013	1,780	79,300
2014	1,760	79,500
2015	1,750	80,100
2016	1,750	80,200
2017	1,740	79,200
2018	1,740	78,800
2019	1,740	80,400
2020	1,740	80,500
2021	1,740	82,500
2022	1,730	82,900
2023	1,730	85,000
2024	1,730	87,000
2025	1,720	87,300

Source: CalTrans, 2005c.

Under the No Action Alternative, about 500 workers would be required in the peak construction period (Phase I). Most of the workers would be earthwork equipment operators and laborers with workers in the trades primarily for hydraulic structures, pumping plants, and filtration plants. The total number of construction workers would represent less than 1 percent of the total construction workers in Imperial and Riverside counties shown in Table 12-19.

To determine if these construction jobs could be provided by workers in Imperial and Riverside counties, the projected types of workers were compared to projections completed by EDD (2006a) for 2012, as presented in Table 20-20. It is anticipated that the work force in these categories would not decrease between 2012 and 2020, and that the construction efforts would represent less than 2 percent of the equipment operators and laborers. Therefore, the work force required to implement the No Action Alternative could be provided by the projected work force in Imperial and Riverside counties. Therefore, no increase in populations due to the construction of the facilities would be anticipated. These projections

have been confirmed through discussions with building industry representatives during preparation of the PEIR (Eckert, 2006).

**Table 12-20**  
**Construction Worker Projections in Imperial and Riverside Counties (2012)**

<b>Types of Construction Workers</b>	<b>Imperial County</b>	<b>Riverside County</b>	<b>Total</b>	<b>Percent of Workers</b>
Supervisors	190	6,360	6,550	5.7%
Trade Workers	1,200	72,770	73,970	64.3%
Equipment Operators	950	5,450	6,400	5.6%
Laborers and Helpers	770	23,590	24,360	21.2%
Others	70	3,650	3,720	3.2%
<b>Total</b>	<b>3,180</b>	<b>111,820</b>	<b>115,000</b>	<b>100%</b>

Source: EDD, 2006b

Operations and maintenance activities would provide jobs for an additional 100 employees. This would represent less than 1 percent of the projected employees in the Transportation and Utilities sector in 2012. Therefore, no increase in population due to operations and maintenance activities is projected under the No Action Alternative.

### **Alternative 1 – Saline Habitat Complex I**

As described in Chapter 3, this alternative would involve construction and operations and maintenance activities for the Sedimentation/Distribution Basins, Air Quality Management, Pupfish Channels, Saline Habitat Complex, and Brine Sink.

The projected work force in the peak construction year would be 1,000 workers. This would represent less than 2 percent of the projected total work force in Imperial and Riverside counties and less, than 4 percent of the projected equipment operators and laborer work force. Therefore, it is estimated that the construction activities under this alternative would not cause additional population growth.

This alternative would result in about 200 operations and maintenance workers. This would represent less than 1 percent of the projected employees in the Transportation and Utilities sector in 2012. Therefore, no increase in population due to operations and maintenance activities is projected under this alternative.

### **Alternative 2 – Saline Habitat Complex II**

As described in Chapter 3, this alternative would involve construction and operations and maintenance activities for the Sedimentation/Distribution Basins, Air Quality Management, Saline Habitat Complex, Shoreline Waterway, Saltwater Conveyance, and Brine Sink.

The projected work force in the peak construction year would be 1,500 workers. This would represent less than 2 percent of the projected total work force in Imperial and Riverside counties and less, than 6 percent of the projected equipment operators and laborer work force. Therefore, it is estimated that the construction activities under this alternative would not cause additional population growth.

This alternative would result in about 300 operations and maintenance workers. This would represent less than 1 percent of the projected employees in the Transportation and Utilities sector in 2012. Therefore, no increase in population due to operations and maintenance activities is projected under this alternative.

### **Alternative 3 – Concentric Rings**

As described in Chapter 3, this alternative would involve construction and operations and maintenance activities for the Sedimentation/Distribution Basins, Air Quality Management, First and Second rings, and Brine Sink.

The projected construction and operations and maintenance work forces would be identical to those described under Alternative 2.

### **Alternative 4 – Concentric Lakes**

As described in Chapter 3, this alternative would involve construction and operations and maintenance activities for the Sedimentation/Distribution Basins; First, Second, Third, and Fourth lakes; and Brine Sink.

The projected work force in the peak construction year would be 1,500 workers. This would represent less than 2 percent of the projected total work force in Imperial and Riverside counties and less, than 6 percent of the projected equipment operators and laborer work force. Therefore, it is estimated that the construction activities under this alternative would not cause additional population growth.

This alternative would result only in 25 operations and maintenance workers because there would be no Air Quality Management facilities. This would represent less than 1 percent of the projected employees in the Transportation and Utilities sector in 2012. Therefore, no increase in population due to operations and maintenance activities is projected under this alternative.

### **Alternative 5 – North Sea**

As described in Chapter 3, this alternative would involve construction and operations and maintenance activities for the Sedimentation/Distribution Basins, Air Quality Management, Saline Habitat Complex, Shoreline Waterway, Saltwater Conveyance, Marine Sea, Marine Sea Recirculation Canal, and Brine Sink.

The projected construction and operations and maintenance work forces would be identical to those described under Alternative 2.

### **Alternative 6 – North Sea Combined**

As described in Chapter 3, this alternative would involve construction and operations and maintenance activities for the Sedimentation/Distribution Basin, Air Quality Management, Pupfish Channels, Saline Habitat Complex, Shoreline Waterway, Saltwater Conveyance, Marine Sea, Marine Sea Mixing Zone, Marine Sea Recirculation Canal, and Brine Sink.

The projected work force in the peak construction year would be 2,000 workers. This would represent less than 3 percent of the projected total work force in Imperial and Riverside counties and less, than 7 percent of the projected equipment operators and laborer work force. Therefore, it is estimated that the construction activities under this alternative would not cause additional population growth.

This alternative would result in about 350 operations and maintenance workers. This would represent less than 1 percent of the projected employees in the Transportation and Utilities sector in 2012. Therefore, no increase in population due to operations and maintenance activities is projected under this alternative.

## **Alternative 7 – Combined North and South Lakes**

As described in Chapter 3, this alternative would involve construction and operations and maintenance activities for the Sedimentation/Distribution Basin, Air Quality Management using Protective Salt Flat on Exposed Playa below -255 feet msl, Exposed Playa without Air Quality Management above -255 feet msl, Saline Habitat Complex, Recreational Saltwater Lake, Recreational Estuary Lake, Marine Sea Recirculation Canal, IID Freshwater Reservoir, two Treatment Plants, and Brine Sink.

The projected work force in the peak construction year would be 2,000 workers. This would represent less than 3 percent of the projected total work force in Imperial and Riverside counties and less, than 7 percent of the projected equipment operators and laborer work force. Therefore, it is estimated that the construction activities under this alternative would not cause additional population growth.

This alternative would result in about 200 operations and maintenance workers because the Air Quality Management methods under this alternative would not require substantial labor efforts. This would represent less than 1 percent of the projected employees in the Transportation and Utilities sector in 2012. Therefore, no increase in population due to operations and maintenance activities is projected under this alternative.

## **Alternative 8 – South Sea Combined**

As described in Chapter 3, this alternative would involve construction and operations and maintenance activities for the Sedimentation/Distribution Basins, Air Quality Management, Saline Habitat Complex, Shoreline Waterway, Marine Sea, Marine Sea Recirculation Canal, and Brine Sink.

The projected work force in the peak construction year would be 2,000 workers. This would represent less than 3 percent of the projected total work force in Imperial and Riverside counties and less, than 7 percent of the projected equipment operators and laborer work force. Therefore, it is estimated that the construction activities under this alternative would not cause additional population growth.

This alternative would result in about 300 operations and maintenance workers. This would represent less than 1 percent of the projected employees in the Transportation and Utilities sector in 2012. Therefore, no increase in population due to operations and maintenance activities is projected under this alternative.

## **Next Steps**

None required.